

REMARKS

The present amendment seeks to place the application in better conformance with U.S. practice. A page containing a revised Abstract of the Disclosure to replace the present Abstract page is enclosed.


The invention as set forth in the present claims is directed to a composition that includes polymers of vinylcyclohexane with an absolute weight average molecular weight M_w from 100,000 to 450,000 g/mol, a molecular weight distribution characterized by a polydispersity index of from 1 to 3 and a maximum melt viscosity of 1000 Pa.s, as measured at 300°C and at a shear rate of 1000 sec⁻¹. The vinylcyclohexane moieties result from the hydrogenation of aromatic units such that the hydrogenation rate of the aromatic units is from 99% to 100%.

U.S. Patent No. 4,911,966 to Murayama et al. (hereinafter "Murayama"), cited by the Examiner in the parent application, discloses that at least 80% by weight of the aromatic rings in the side chains of the molecule of the vinyl aromatic polymer B are hydrogenated (col. 5, lines 9-15). The preparation examples in Murayama (cols. 9-10, Table 2) have a hydrogenation rate of 97%, 85%, and 83% by weight. Murayama does not disclose higher rates of hydrogenation, how to achieve higher rates of hydrogenation, or any advantages to higher rates of hydrogenation in the resulting polymer.

As such the claims are novel and non-obvious over Murayama.

Entry of the amendment and early allowance of Claims 9-15 are requested.

Respectfully submitted,

By 

Gary F. Matz
Agent for Applicants
Reg. No. 45,504

Bayer Corporation
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3897
FACSIMILE PHONE NUMBER:
(412) 777-3902
s:\shared\kg\049pre

Mo-6749N

VINYLCYCLOHEXANE-BASED POLYMERS

Abstract of the Disclosure

A molding composition comprising a (co)polymer of vinylcyclohexane is disclosed. The copolymer is characterized in having an absolute molecular weight M_w of 100,000 to 450,000 g/mol, polydispersity index of 1 to 3 and maximum melt viscosity of 1000 Pa.s, as measured at 300°C and at a shear rate of 1000 sec^{-1} . The composition is suitable for producing a variety of molded article most notably optical data storage media.